

Abstract

A hermetically sealed glass package and method for manufacturing the hermetically sealed glass package are described herein using an OLED display as an example. Basically, the hermetically sealed OLED display is manufactured by providing a first substrate plate and a second substrate plate and depositing a frit onto the second substrate plate. OLEDs are deposited on the first substrate plate. An irradiation source (e.g., laser, infrared light) is then used to heat the frit which melts and forms a hermetic seal that connects the first substrate plate to the second substrate plate and also protects the OLEDs. The frit is glass that was doped with at least one transition metal and possibly a CTE lowering filler such that when the irradiation source heats the frit, it softens and forms a bond. This enables the frit to melt and form the hermetic seal while avoiding thermal damage to the OLEDs.